NEW FOR 2020-2021

Cholla Construction
JROTC
Pueblo Computer Science
Rincon HVAC
HIGH SCHOOLS THAT OFFER CTE PROGRAMS

- CATALINA
- CHOLLA
- PALO VERDE
- PUEBLO
- RINCON
- SABINO
- SAHUARO
- SANTA RITA
- TUCSON
- UNIVERSITY

AUTOMOTIVE:
- Auto Collision Repair
- Automotive Technologies
- Diesel Engine Repair

BUSINESS:
- Business Management
- Business Operations
- Marketing

HEALTH SCIENCES:
- Bioscience
- Dental Assisting
- Home Health Aide
- Pharmacy Support Services
- Sports Medicine

CONSTRUCTION:
- Construction Technologies
- Heating, Ventilation & Air Conditioning (HVAC)

CULINARY ARTS

COMMUNICATIONS MEDIA:
- Digital Photography
- Digital Printing
- Film & TV Production
- Graphic and Web Design
- Digital Communication
- Music & Audio Production

ELECTRONIC TECHNOLOGIES

ENGINEERING:
- Computer Science
- Engineering
- Mechanical Drafting

HUMAN SERVICES:
- Early Childhood Education
- Law and Public Safety
- JROTC

MANUFACTURING:
- Precision Machining
- Welding Technologies
Extended day opportunities are options for students to fulfill course offerings after the regular school day. Classes meet from 3:30 p.m. - 5:30 p.m. Monday, Tuesday and Thursday. Transportation and meals are provided.

CULINARY ARTS SCHOOLS OFFERING THIS PROGRAM:

DENTAL ASSISTING SCHOOLS OFFERING THIS PROGRAM:

DIESEL ENGINE REPAIR SCHOOLS OFFERING THIS PROGRAM:
Students are introduced to the auto collision industry using the industry endorsed curriculum I-CAR, manufacturing recommendations and industry standards as guides. There will be an introduction to structural and beginning refinishing. Automotive collision is a field that incorporates both artistic and technical skills. This is a Pima JTED enhanced program.

Students analyze theories and principles of the 4-stroke engine, maintenance and repair of modern automobiles. Classes include safety and hazardous materials handling, mechanical inspection or testing of various automobile operating systems. Learning through written, PC based, and hands-on assignments strengthens the understanding of complexities of the automobile. This is the first step to an exciting career in the automotive transportation career. This is a Pima JTED enhanced program, community college credit may be available and there may be extended day opportunities.

**CAREERS**

**AUTOMOTIVE – Collision**
Auto Body Technician
Automotive Refinishing
Collision Shop Management
Collision Shop Estimator
Claims Handler
Claims Adjuster

**AUTOMOTIVE – Technologies**
Automotive Technician
Service Writer/Manager
Parts Specialist
Automotive Designer
Aircraft Mechanic
Small Engine Technician
Automotive Sales
Diesel Engine Repair 1,2 - Grades 9-11 prepares the student to apply technical knowledge and skills in the safety, adjustment, maintenance, part replacement and the use of tools, equipment and machines as they relate to basic automotive care.

Diesel Engine Repair 3,4 – Grades 10-11 prepares the student to apply technical knowledge and skills in the safety, adjustment, maintenance, part replacement and the use of tools, equipment and machines as they relate to basic automotive care, electrical functions in automotive applications and the repair, service and maintenance of diesel engines. Must have completed Diesel Engine Repair 1,2

Diesel Engine Repair 5,6- Grades 11-12 prepares the student to apply technical knowledge and skills in the safety, adjustment, maintenance, part replacement and the use of tools, equipment and machines as they relate to basic automotive care, electrical functions in automotive applications and the repair, service and maintenance of diesel engines. In addition, student will be exposed to the beginning principles and concepts of pneumatics and hydraulics. Must have completed Diesel Engine Repair 1,2 & 3,4
BUSINESS OPERATIONS

Business Operations is for students interested in performing the duties of a support professional in a business setting. Training is included in professional communications, business technology operations, forms design, records management, report preparation, intro to business law, decision making, and career preparation. This is a Pima JTED enhanced program, and community college credit may be available.

BUSINESS MANAGEMENT

Business Management Administrative Services students learn the process of business operations and explore starting, owning and managing a business by addressing the Business Management and Administrative Services standards. This is a Pima JTED enhanced program and community college credit may be available.

MARKETING

Marketing students are introduced to the Marketing, Management, and Entrepreneurship program standards designed to prepare students for employment in various sales, customer service, advertising and promotion, and first-line positions in wholesale, retail, and service establishments. The program enables students to explore, understand, and apply marketing, management, and entrepreneurial principles. This is a Pima JTED enhanced program and community college credit may be available.

CAREERS

BUSINESS MANAGEMENT
- BMAS: Business Manager
  - Operations Manager
  - Corporate Executive
  - Entrepreneur
  - Financial Planner
  - Human Resources Specialist
  - Marketing Specialist

BUSINESS OPERATIONS
- BOSAS: Business Manager
  - Administrative Assistant
  - Public Relations Specialist

MARKETING
- Advertising Manager
- Media Coordinator
- Product Manager
- Sales Director
- Public Relations Specialist
- Market Analyst

SCHOOLS OFFERING THIS PROGRAM:
HEALTH SCIENCES

BIOSCIENCE

Bioscience students use multiple modern molecular lab techniques such as micro pipetting, DNA extraction, DNA amplification and visualization of DNA on electrophoresis gels to investigate authentic research questions. Classes may collaborate with a research lab to do authentic research-based projects, acquire skills needed to pursue higher education and to enter industry workforce in careers related to Bioscience. This is a Pima JTED enhanced program and college credit may be available.

DENTAL ASSISTING

Dental Assisting 1,2 Grades 10-11
This first-year course provides instruction based on the basic skills essential to working successfully with patients and co-workers in dental offices and clinics. These skills include: study skills, vital signs, communication in the dental environment and job entry skills. In addition, students are introduced to the principles and techniques of dental assisting including: anatomy, physiology, microbiology, oral pathology, and nutrition relating to dental health.

Dental Assisting 3,4 Grade 12
This second-year course provides more extensive instruction on the principles and techniques of dental assisting: tooth morphology of human dentition, hand and rotary dental instruments, instruments used in various operative procedures, and chairside procedures. In addition, principles of dental radiography as a diagnostic aid are taught, including radiation protection and biology. Students also learn about clinic experiences in exposing, processing, mounting, and interpreting radiographs on mannequins using a variety of radiographic techniques. Must have completed Dental Assisting 1,2.

BIOSCIENCE
Clinical Cytogeneticist
Genetics Counselor
Nanotechnologist
Biomedical Engineer
Biochemist
Genetic Engineer

DENTAL ASSISTANT
Dental Hygienist
Radiologist Technologist
Surgical Technologist
Neurodiagnostic Technologist
Endoscopy Technologist

CAREERS

SCHOOLS OFFERING THIS PROGRAM:

BIOSCIENCE
Clinical Cytogeneticist
Genetics Counselor
Nanotechnologist
Biomedical Engineer
Biochemist
Genetic Engineer

DENTAL ASSISTANT
Dental Hygienist
Radiologist Technologist
Surgical Technologist
Neurodiagnostic Technologist
Endoscopy Technologist

SCHOOLS OFFERING THIS PROGRAM:

DENTAL ASSISTING
Dental Assisting 1,2 Grades 10-11
Dental Assisting 3,4 Grade 12

CTE Career & Technical Education 2020-2021

TUCSON UNIFIED SCHOOL DISTRICT
SPORTS MEDICINE

Students apply academic and technical knowledge and skills related to industry standards and practices of Sports Med/Athletic Training. This course introduces students to the field of sports medicine and the professionals working in the Sports Medicine field. Students learn about athletic injuries and anatomy of the human body. In the Advanced lab, experience working in the athletic training room is a requirement. This is a Pima JTED enhanced program.

HEALTH SCIENCES

HOME HEALTH AIDE

SCHOOLS OFFERING THIS PROGRAM:
In this course, students explore health related and medical careers. This and is a prerequisite for all JTED Central Healthcare Pathway programs. Upon successful completion, the following pathways are offered: Junior: Certified Caregiver, Health Information Management (JTED Central Campus Hybrid Class) Medical Assisting, EMT, Physical Therapy Tech and LNA. Sophomore: Pathway to Health Information Management (JTED Central Campus Hybrid Class) This is a Pima JTED enhanced course. This course has extended day offerings.

PHARMACY TECH

SCHOOLS OFFERING THIS PROGRAM:
The course prepares students to apply academic and technical knowledge and skills of the Pharmacy Technician in a clinical, medical or retail setting or to continue into postsecondary education. This is a Pima JTED enhanced course, and community college credit may be available.

SPORTS MEDICINE

SCHOOLS OFFERING THIS PROGRAM:
Students apply academic and technical knowledge and skills related to industry standards and practices of Sports Med/Athletic Training. This course introduces students to the field of sports medicine and the professionals working in the Sports Medicine field. Students learn about athletic injuries and anatomy of the human body. In the Advanced lab, experience working in the athletic training room is a requirement. This is a Pima JTED enhanced program.

CAREERS

HOME HEALTH AIDE
Certified Caregiver/EMT
Health Info Mgmt
Medical Assisting
Physical Therapy Tech
Licensed Nursing Assistant
Pharmacy Tech/Dental Assistant

PHARMACY TECH
Pharmacy Technician
Pharmacist

SPORTS MEDICINE
Athletic Trainer, EMT
PT/PA/Physician
Sports Psychologist
Orthopedic Surgeon
Exercise Physiologist

TUCSON UNIFIED SCHOOL DISTRICT 2020-2021
Career & Technical Education
Construction Technology Students are introduced to and apply the Construction Technologies program standards designed to prepare students for careers in the Construction Industries. Standards are aligned with the National Center for Construction Education & Research (NCCER). This is a Pima JTED enhanced program and community college credit may be available.

CAREERS

Construction Laborer, Foreman, Manager
Civil & Electrical Engineer
Architect, Carpenter, Mason, Plumber
Electrician, Cost Estimator
Construction & Building Inspector

Heating, Air Conditioning, and Refrigeration Mechanics, Heating, Air Conditioning, and Refrigeration Installers

SCHOOLS OFFERING THIS PROGRAM:

Heating, Ventilation and Air Conditioning SCHOOLS OFFERING THIS PROGRAM:

HVAC students learn to apply technical knowledge and skills to repair, install, service and maintain the operating condition of heating, air conditioning, and refrigeration systems. Standards are aligned with the National Center for Construction Education & Research (NCCER). This is a Pima JTED enhanced program.

HVAC

Heating, Air Conditioning, and Refrigeration Mechanics, Heating, Air Conditioning, and Refrigeration Installers
The Culinary Arts program prepares students to apply technical knowledge and skills required for food production and service occupations in institutional and commercial food establishments. This is a Pima JTED enhanced program and has extended day offerings.

**CULINARY**

**CAREERS**

Chef/Pastry Chef/ Baker  
Restaurant/Bakery Owner, Manager  
Prep Cook  
Food Engineer  
Food Service Manager  
Dietician  

**SCHOOLS OFFERING THIS PROGRAM:**

The Culinary Arts program prepares students to apply technical knowledge and skills required for food production and service occupations in institutional and commercial food establishments. This is a Pima JTED enhanced program and has extended day offerings.
PHOTOGRAPHY

Students develop a working knowledge of digital photographic techniques, theory, history, and learn how to use digital cameras to demonstrate their creativity. Students are introduced to digital manipulation techniques and software, including Adobe Photoshop. Students also learn the fundamentals of art, the history of photography and study famous photographers’ works and styles. This is a Pima JTED enhanced program and community college credit may be available.

CAREERS

PHOTOGRAPHY
- Photojournalist
- Videographer, Cinematographer
- Camera Operator, Portrait Photographer
- Photo Editor
- Photo Retouch Specialist
- Event, Sports Photographer
- Magazine Advertising

DIGITAL PRINT

Students develop skills in computer layout and design, presswork, digital platemaking procedures, plate making, and finishing applications. Students learn about safety, history of printing, measurement, layout, color management, customer service, supply management, darkroom processing, press operation and binding & finishing. Students are introduced to Adobe Photoshop, InDesign, and Illustrator. Students explore art design, photography, and marketing and create products such as postcards, brochures, invitations, screen prints, posters and logo design for their professional portfolio. This is a Pima JTED enhanced program and community college credit may be available.

CAREERS

DIGITAL PRINT
- Layout Artist
- Brand, Identity, Logo Design
- Illustrator
- Multimedia Designer
- Prepress Technician
- Art Director/Creative Director
SCHOOLS OFFERING THIS PROGRAM:

GRAPHIC DESIGN

Students create and explore traditional and digital art as a means of visual communication, use Apple iMac computers with Adobe and Apple software to create designs for print and the web. Traditional hand drawing is taught as a means to practice layout and design skills prior to creating the design on the computer. Students participate in critiques to interpret, analyze, and evaluate graphic design pieces from a contemporary, historical and cultural perspective. All students create designs, are critiqued and revise. Designs are included in a professional portfolio. This is a Pima JTED enhanced program and community college credit may be available.

FILM AND TV

Film and TV Students analyze the media industry, business practices and the role in the economy, intellectual property laws and rights and verbal, and non-verbal communication skills. Students utilize computer applications, capture and manipulate digital images, and use editing software from concept to completion. Students analyze, evaluate and write for television and film. This is a Pima JTED enhanced program and community college credit may be available.

CAREERS

GRAPHIC DESIGN

Multimedia Designer
Animator

FILM AND TV

Independent Filmmaker
Broadcast Journalist
Public Information Officer
Reporter/ Correspondent
Journalist
Broadcast News Analyst

Tucson Unified School District

CTE Career & Technical Education

2020-2021
MUSIC AND AUDIO PRODUCTION

Students are introduced to music theory, instrumental and vocal technique and history. Students perform at school concerts, participate in the technical and management areas of the performing arts and the entertainment industry. Students develop the skills needed for postsecondary studies. This is a Pima JTED enhanced program.

CAREERS

DIGITAL COMMUNICATIONS
- Journalists
- Reporter
- News Analysts
- Film/Video Editor
- Technical Writer

MARIACHI
- Audio Engineer
- Radio/Television Announcer
- Performance Artist
- Musician
- Teacher

SCHOOLS OFFERING THIS PROGRAM:

TUCSON UNIFIED SCHOOL DISTRICT 2020-2021
ELECTRONICS SCHOOLS OFFERING THIS PROGRAM:

Students are introduced to and apply the Electronic program standards, including interpreting blueprints, schematics of systems, knowledge of electricity concepts, knowledge of electronic quantity units and circuits. This is a Pima JTED enhanced program and community college credit may be available.

CAREERS

ELECTRONICS
Engineering Technician
Electronic Equipment Installer
Information Technology Manager
Electronic Repair Technician
Electronic Drafter
ENGINEERING

MECHANICAL DRAFTING

COMPUTER SCIENCE

SCHOOLS OFFERING THIS PROGRAM:
Year 1 Introduction to Computer Science explores computational thinking and programming concepts through project based learning. Year 2 AP Computer Science Principles focuses on fundamentals of computing, problem solving, working with data, understanding the internet, cyber security and programming. Year 3, AP Computer Science, uses industry standard Java programming language and presents topics built around problem solving. This is a JTED enhanced program and this program has extended day offerings and students may earn college credit.

ENGINEERING SCHOOLS OFFERING THIS PROGRAM:
Students learn to design, develop and validate projects. Prerequisite: in both electrical and embedded software design. Advanced projects focus on a research project with detailed plans and schedules for investigation of engineering concepts. Third year students utilize a robotics theme to manage schedules, design considerations and technical issues. This is a Pima JTED enhanced program.

MECHANICAL DRAFTING SCHOOLS OFFERING THIS PROGRAM:
Mechanical Drafting Design Students are introduced to the Drafting/Design Technology program standards to prepare students to apply technical skills, create working drawings and computer simulations for a variety of applications. This is a Pima JTED enhanced program and community college credit may be available.

CAREERS

COMPUTER SCIENCE
Software Applications Developer
Computer Systems Analyst
Computer Systems Engineer
Network Systems Administrator
Database Administrator
Business Intelligence Analyst
Web Developer
Computer Programmer
Software Systems Developer
Software Quality Assurance Tester

ENGINEERING
Civil, Biomedical, Chemical, Electrical, Computer
Robotics
Environmental, Aerospace, Mechanical, Nuclear
Mining

MECHANICAL DRAFTING
Civil Engineer
Drafter
Mapping Technician
Engineering Technician
Architect
Interior Designer
LAW, PUBLIC SAFETY AND SECURITY

Students apply academic and technical knowledge and skills related to industry standards and practices in a variety of settings within Law, Public Safety and Security services. This is a Pima JTED enhanced program and community college credit may be available.

EARLY CHILDHOOD PROFESSIONS

This course introduces students to the technical knowledge and skills associated with Early Childhood Education, preparing them to understand the physical, mental and social growth of children for occupations in Early Childhood Education. This is a Pima JTED enhanced course and community college credit may be available.

CAREERS

JROTC SCHOOLS OFFERING THIS PROGRAM:

The Army Junior Reserve Officer Training program is designed to teach high school students the value of citizenship, leadership, service to the community, personal responsibility, and a sense of accomplishment, while instilling in them self-esteem, teamwork, and self-discipline.

LAW, PUBLIC SAFETY & SECURITY SCHOOLS OFFERING THIS PROGRAM:

Students apply academic and technical knowledge and skills related to industry standards and practices in a variety of settings within Law, Public Safety and Security services. This is a Pima JTED enhanced program and community college credit may be available.

EARLY CHILDHOOD PROFESSIONS SCHOOLS OFFERING THIS PROGRAM:

This course introduces students to the technical knowledge and skills associated with Early Childhood Education, preparing them to understand the physical, mental and social growth of children for occupations in Early Childhood Education. This is a Pima JTED enhanced course and community college credit may be available.

JROTC
- Military Career
- Law Enforcement
- Public Relations

LAW, PUBLIC SAFETY & SECURITY
- Police, Security, Corrections
- Border Patrol
- CIA/FBI Agent
- Detective
- Lawyer
- Emergency Dispatcher
- Probation Officer
- Crime Scene Documentation

EARLY CHILDHOOD EDUCATION
- Daycare Provider, Business Owner
- Early Education Teacher
- Child Development Specialist
- Counselor
- Child Psychologist
- Preschool Teacher
WELDING TECHNOLOGIES
Students are introduced to and apply technical knowledge and skills to join or cut metal surfaces. Students learn how to weld and make different projects using various metals. This is a Pima JTED enhanced program and community college credit may be available.

PRECISION MACHINING
Students are introduced to safety, measurement, careers, and basic machine tool operations. Students operate CNC machines to develop projects. Students work toward obtaining nationally recognized credentials including the NIMS (National Institute of Metalworking Skills) certification. Skills can also be applied towards the engineering area and lead to high paying careers in the aerospace industries. This is a Pima JTED enhanced program and community college credit may be available.

SCHOOLS OFFERING THIS PROGRAM:

**CAREERS**
- Precision Machining
  - Mechanical Engineer
  - Manufacturing Engineer
  - Computer Numerical Control
  - Machine Programmer
  - Control Machine Operator
  - Manual Machinist
  - Mechanical Inspector
  - Electrical Discharge Machine Operator

- Welding
  - Arc Welder, Underwater Welder
  - General Welder, Fabricator, Cutter
  - Welder fitter, Maintenance Welder

**SCHOOLS OFFERING THIS PROGRAM:**

2020-2021
DATA DRIVEN

65  Career & Technical Education Programs
100  Internships
632  Industry Recognized Certifications
989  Technical Skill Assessments Passed
7,038  Career & Technical Education Students
Non-Discrimination Policy

Tucson Unified School District does not discriminate on the basis of race, color, religion, national origin, sex, disability, age, sexual orientation, gender identity, gender expression, or immigration status in admission and access to its programs, services, activities, or in any aspect of their operations and provides equal access to the Boy Scouts and other designated youth groups. The lack of English language skills shall not be a barrier to admission or participation in the District’s activities and programs. Tucson Unified School District also does not discriminate in its hiring or employment practices.

For further information on notice of non-discrimination, visit https://wdcrobcolp01.ed.gov/cfapps/OCR/contactus.cfm for the address and phone number of the office that serves Arizona, or call 1-800-421-3481.

FOR MORE INFORMATION ABOUT CTE PROGRAMS OFFERED AT TUCSON UNIFIED SCHOOLS:

520-225-4652          HTTP://WWW.TUSD1.ORG/CTE
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